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| APPLICATION NO.  | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.            | CONFIRMATION NO. |
|--|---------------|----------------------|--------------------------------|------------------|
| 09/609,347   | 07/05/2000    | Robin Cheung         | AMAT/3421.C1/ISM/COPPER/D 5540 |                  |
| 75   | 90 02/26/2002 |                      |                                |                  |
| Patent Counsel Applied Materials Inc P O Box 450-A Santa Clara, CA 95052 |               | •••                  | EXAMINER                       |                  |
|  |               |                      | SMITH HICKS, ERICA D           |                  |
|  |               |                      |                                |                  |
| Santa Ciara, Cr  | 1 75052       |                      | ART UNIT                       | PAPER NUMBER     |
|  |               |                      | 1741                           | R                |
|  |               |                      | DATE MAILED: 02/26/2002        |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.                   | Applicant(s)        |  |  |  |
|---|-----------------------------------|---------------------|--|--|--|
|   | 09/609,347                        | CHEUNG, ET AL       |  |  |  |
| Office Action Summary   | Examiner                          | Art Unit            |  |  |  |
| ·   | Erica Smith-Hicks                 | 1741                |  |  |  |
| The MAILING DATE of this communication appears on the cover shelf twith the correspondence address Period for Reply   |                                   |                     |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |                                   |                     |  |  |  |
| 1) Responsive to communication(s) filed on <u>05 J</u>  | <u>uly 2000</u> .                 |                     |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ☐ Thi   | s action is non-final.            |                     |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |                                   |                     |  |  |  |
| Disposition of Claims   |                                   |                     |  |  |  |
| 4) Claim(s) 1-20 is/are pending in the application  |                                   |                     |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |                                   |                     |  |  |  |
| 5) Claim(s) is/are allowed.   |                                   |                     |  |  |  |
| 6) Claim(s) is/are rejected.  |                                   |                     |  |  |  |
| 7) Claim(s) is/are objected to.   |                                   |                     |  |  |  |
| 8) Claim(s) <u>1-20</u> are subject to restriction and/or election requirement.  Application Papers   |                                   |                     |  |  |  |
| 9) The specification is objected to by the Examine  |                                   |                     |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |                                   |                     |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                                   |                     |  |  |  |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.  |                                   |                     |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |                                   |                     |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |                                   |                     |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |                                   |                     |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |                                   |                     |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |                                   |                     |  |  |  |
| 1. Certified copies of the priority documents   | s have been received.             |                     |  |  |  |
| 2. Certified copies of the priority documents   | s have been received in Applicati | on No               |  |  |  |
| <ul> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |                                   |                     |  |  |  |
|   |                                   |                     |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |                                   |                     |  |  |  |
| <ul> <li>a)          The translation of the foreign language provisional application has been received.     </li> <li>15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>   |                                   |                     |  |  |  |
| Attachment(s)   |                                   |                     |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)  4) Interview Summary (PTO-413) Paper No(s)  5) Notice of Informal Patent Application (PTO-152) 6) Other:   |                                   |                     |  |  |  |
| J.S. Patent and Trademark Office  |                                   | Part of Paper No. 7 |  |  |  |

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## **DETAILED ACTION**

## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-11 and 18-20, drawn to an electrochemical deposition system, classified in class 204, subclass 194+.
  - II. Claims 12-17, drawn to a method for depositing metal on a substrate, classified in class 205, subclass 118+.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case both the process as claimed can be practiced by another materially different apparatus, e.g., a plating line wherein the deposition cells are not integrated with cell to cell nor with thermal anneal or SRD chambers, and the apparatus as claimed can be used to practice another and materially different process, e.g., an electro-etching or electroless etching process.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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4. A telephone call was made to Atty. Phong D. Nguyen on February 21, 2002 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica Smith-Hicks whose telephone number is 703/ 305-7645. The examiner can normally be reached on Wed.-Fri. from 7:30 a.m.-6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703/308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703/872-9311 for regular communications and 703/872-9310 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703/ 308-0661.

Erica Smith-Hicks
Examiner
Art Unit 1741

Donald R Valentin

ESH February 22, 2002

DONALD R. VALENTINE
PRIMARY EXAMINER
GROUP-1400-(74)